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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LEFF, STEVEN N	
ART UNIT	PAPER NUMBER
1761	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/798,472	SHOOP ET AL.	
	Examiner	Art Unit	
	Steven Leff	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☒ Claim(s) *19-23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

- With regard to claims 19-23, it appears that the phrase "the method" should be replaced with the phrase "the composition." It is noted that claims 19-23 were examined with respect to the composition.

- It appears that claim 8 may be dependant from claim7, not claim 6. In addition, claim 8 recites only one aldehyde, where claim 7 recites "aldehydes" plural.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

  - With respect to claim 1, the phrase "capable of transferring" is unclear as to how the browning agent may be "transferred" and further indefinite due to the fact that it is unclear how the term "capable" modifies this action, and the claimed composition itself.

  - With respect to claim 7, the phrase "the browning agent comprises aldehydes" is unclear as to whether a) more than 1 molecule of 1 aldehyde is present b) more than 1 molecule of more than 1 aldehyde is present c) one molecule of more than one aldehyde d) more than one molecules of one aldehyde is present in the browning agents.

  - The phrase "or glycol" in claims 23 and 24 lacks antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

- Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood et al. (WO/0210034)

  With respect to claims 1-20, and 28-32, Underwood et al. teach a liquid composition for application to a food packaging film. (abstract) Specifically with regard to claim 1, Underwood et al. teach a composition comprising CHARSOL ® as the browning agent, where the CHARSOL ® produces a smoke flavor, or where the browning agent is MAILLOSE ® caramel coloring. (pg. 10 line 20+) Underwood et al continue by teaching that the composition further contains a viscosity-modifying agent, (pg. 14, line 19+) a surfactant, (pg. 18 line 30+) and water (pg. 18 line 25+). In addition Underwood et al. teach that the browning agent contains hydroxyacetaldehyde (HAA), where HAA causes the solution to be acidic, and further where the composition is capable of transferring the browning agent of the composition from the food packaging film to a foodstuff packaged in the food packaging film. (pg. 7 line 20+)

  Underwood et al. continue by teaching that the browning agent is capable of undergoing a Maillard reaction with meat proteins, (page 15 line 13+, pg. 8 line 23+) and further where the browning agent comprises a pyrolysis product from combustion of a sugar, a starch, or a mixture thereof, (pg. 11 line 8+) and further contains aldehydes, and more specifically hydroxyacetaldehyde. (pg. 10 line 20+) In the case of CHARSOL ®, Underwood et al. teach that the browning agent may comprise a pyrolysis product from combustion of wood or cellulose, (pg. 11 line 25+) where pyrolysis liquids and dry powder formulations, e.g., liquid smoke compositions and compositions containing hydroxyacetaldehyde (HAA), are useful as a replacement for the browning and flavoring of a foodstuff by direct contact of a foodstuff with smoke produced from burning wood.

The composition may also contain a flavoring agent, which may comprise a phenol, an acid, or a mixture thereof, (pg. 11 line 25+) and may also include a surfactant. (pg. 18 line 30+) With respect to claims 14 and 17, Underwood et al. teach that the composition comprises a viscosity-modifying agent wherein the viscosity-modifying agent comprises cellulose, a gum, or cellulose ether. (pg. 11 line 33+)

Therefore with regard to claims 1-20, 28-32although Underwood et al. does not teach the specific weight percentages within the overall composition with respect to the percentage of browning agent, viscosity agent, and the surfactant, Underwood et al. does teach the general concept of using these components within the overall composition for their art recognized and applicants intended function of providing a composition which is capable of transferring a browning agent to a packaged food. In addition Underwood et al. does teach a range with respect to the amount of HAA within the composition. Therefore, due to the fact that Underwood et al. teaches that MAILLOSE ® contains between .001% to about 35% and further teaches that the overall composition may contain from .01% to about 35% HAA, in the instance where the final composition contains .5% HAA and the HAA content within the MAILLOSE ® is 35%, Underwood et al. teach a final composition which comprises 1.4% of a browning composition. In the instance that the HAA content within the MAILLOSE ® is 1%, Underwood et al. teach a final composition which comprises 50% of a browning composition. With specific regard to the percentage of browning agent within the overall composition and the pH range recited in claims 1, and 28, although Underwood et al. does not teach the specific pH value, Underwood et al. does teach the specific components of the composition with respect to claim 1, where one of the components in HAA, which is an acid. Therefore it would be expected that the composition of Underwood et al. would have a pH in the range of about 2 to about 6.5 minus any clear and convincing arguments to the contrary.

Therefore due to the fact that the concentration of a pyrolysis product, and consequently HAA applied, depends on the particular pyrolysis product selected, the particular meat to be treated, the particular conditions for the browning reaction, and the desired final color, where the higher the Maillose ® concentration, the darker the browning effect, one of ordinary skill in the art would have been motivated to recite specific percentages with respect to the components of the liquid composition in order to produce a product which has a specific taste due to exact measurements, and would have

further been motivated due to the fact that Underwood et al. positively recites the claimed weight percentages albeit in a very broad manner. In addition MPEP 2144.05 II A states that when the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. MPEP 2144.05 II A continues by stating that the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages minus any clear and convincing arguments to the contrary.

With regards specifically to claims 21-27, and 30-32 although Underwood et al. does not teach the specific amount which is applied to the food contact surface, or all of the specific optional components, Underwood et al. does teach the method of claim 31 with respect to applying a liquid composition to a food packaging film, (claim 11, pg. 27 line 1+) as well as heating the package containing the food for its art recognized and applicants intended function of providing a composition which is capable of transferring a browning agent to a packaged food. Underwood et al. further teach that the amount which is applied may be specifically .1g to 1 g per square centimeter of the susceptor surface area, (clm. 1) in addition to reciting that the amount applied as well as the overall total composition of the agent itself, are dependant upon other factors such as the particular meat to be treated, the particular conditions for the browning reaction, and the desired final color, where the higher the HAA concentration, the darker the browning effect.

Therefore with respect to claims 1-32, it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have selected specific weight percent with respect the components of the liquid composition in order to produce a specific tasting food item which is produced due to the specific parameters with regards to the preparation, coating and heating of the liquid composition.

- Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Underwood et al. (WO 02/10034) in view of Jon et al. (6143344)

Underwood et al. is taken as above.

With regard to claims 1-32, Jon et al. teach "self-coloring casings by providing a transferable, uniformly coloring composition and a machine peel able casing coated

therewith. The inventive casing has a colorant coating which has preferential substantivity to a proteinaceous and fat containing foodstuff such as meat, cheese or processed beans." (col. 8 line 10+) The coloring composition includes a browning agent, a viscosity-modifying agent, a surfactant, a salt, and water.

Specifically with regard to claims 1-32, Jon et al. teach a composition comprising about 20% to about 47%, by weight, of a browning agent, (col. 29 line 63+) about 0.05% to about 2%, by weight, of a viscosity-modifying agent, (col. 3 line 9) 0% to about 10%, by weight, of a surfactant, a polyol, or mixture thereof, (col. 21 line 54+) 0% to about 3%, by weight, of a pharmaceutically acceptable salt, and water (pg. 18 line 25+). The composition further is acidic and is capable of transferring the browning agent of the composition from the food packaging film to a foodstuff packaged in the food packaging film. (pg. 7 line 20+)

Specifically regarding claims 21-27, Jon et al. teach a coloring composition which includes a surfactant and a polyol, (col. 17 line 19+) where the surfactant is lecithin, (col. 14 line 56+) and where the browning agent further comprises sodium salt. (col. 13 line 20+)

Therefore regarding claims 21-27 although Underwood et al. does not teach the specific surfactant or the use of a salt, Underwood et al. does teach the use of surfactants as well as the use of CHARSOL ®. In addition Jon et al. does teach the specific salt and surfactants, as well as relative weight percents within the composition. Therefore one of ordinary skill in the art would have been motivated to combine the teachings of Underwood et al. and Jon et al. in order to produce a liquid composition for applying to food packaging film which included specific weight percents as well as specific surfactants and/or salts, in order to ensure that an even distribution of the coating composition on the casing surface occurs. In addition MPEP 2144.05 (II) (A) states that when the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. MPEP 2144.05 (II) (A) continues by stating that the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages minus any clear and convincing arguments to the contrary.

Therefore with respect to claims 1-32 it would have been obvious to one of ordinary skill in the art at the time of the invention by applicant to have produced a liquid composition which contained specific weight percents as well as types of the specific components, in order to provide a composition which ensures an even distribution of the coating composition on the casing surface as well as to reduce relative added costs. The overall costs of producing and/or applying the liquid composition may be reduced due to the fact that a specific composition with optimum weight percentages is recited, thus avoiding the use of an amount which would merely be excess, with regard to the specific weight percents of the components within the overall liquid compositions, which are necessary to effectively transfer the liquid composition to the food item, where an exact degree of browning occurs within the packaging.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Leff whose telephone number is (571) 272-6527. The examiner can normally be reached on Mon-Fri 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SL

KEITH HENDRICKS
PRIMARY EXAMINER